

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 - 89 (Canceled).

90 (Previously presented) The polypeptide of claim 100, wherein said first interactor domain and said second interactor domain bind to a single ligand, and

wherein said circularly permuted TEM-1 β -lactamase protein is functionally reconstituted only upon binding of said first interactor domain and said second interactor domain to said ligand.

91 (Previously presented) The polypeptide of claim 90, wherein said ligand is comprised of an antigen fused to a second monomer of a hetero-dimerizing helix protein, said first interactor domain is an antibody, and said second interactor domain is a first monomer of a hetero-dimerizing helix, or

wherein said ligand is comprised of an antibody fused to a second monomer of a hetero-dimerizing helix protein, said first interactor domain is an antigen and said second interactor domain is a first monomer of a hetero-dimerizing helix and

wherein the first monomer of the hetero-dimerizing helix specifically binds to the second monomer of the hetero-dimerizing helix protein and the antibody specifically binds to the antigen.

92 (Currently amended) The polypeptide of claim 91, wherein the antibody of the first interactor domain, or the antibody of the ligand comprising an antibody fused to a second monomer of the hetero-dimerizing helix protein, is an scFv a single chain antibody fragment (scFv).

93-97 (Canceled).

98 (Previously presented) The polypeptide of claim 100, wherein the first interactor domain is fused through a first flexible polypeptide linker to the circularly permuted β -lactamase protein through the N-terminal break-point, and the second interactor domain is fused through a second flexible polypeptide linker to the circularly permuted β -lactamase protein through the C-terminal break-point.

99 (Previously presented) The polypeptide of claim 98, wherein said first polypeptide linker is 3-30 amino acids in length; and wherein said second polypeptide linker is 3-30 amino acids in length.

100 (Currently amended) A polypeptide consisting essentially of:
a circularly permuted TEM-1 β -lactamase protein, joined at the original amino and carboxy termini, having an N-terminal fragment portion with a new C-terminus and a C-terminal fragment portion with ~~an~~ a new N-terminus, a first interactor domain, and a second interactor domain;

wherein the first interactor domain is fused through the new N-terminus of the C-terminal fragment portion, and the second interactor domain is fused through the new C-terminus of the N-terminal fragment portion; and

wherein the new N-terminus and the new C-terminus are located within a solvent exposed loop between amino acid residues Thr 195 and Ala 202 (residues 170-177 of SEQ ID NO:2); and

wherein the first interactor domain is selected from the group consisting of an antibody, an antigen, a first monomer of a hetero-dimerizing helix, a second monomer of a hetero-dimerizing helix, a receptor, a member of an expressed sequence library, and a member of a constrained peptide library; and

wherein the second interactor domain is selected from the group consisting of an antibody, an antigen, a first monomer of a hetero-dimerizing helix, a second monomer of a hetero-dimerizing helix, a receptor, a member of an expressed sequence library, and a member of a constrained peptide library;

wherein the circularly permuted TEM-1 β -lactamase protein is functionally reconstituted only upon binding of said first interactor domain to said second interactor domain, optionally through a ligand.

101 (Currently amended) The polypeptide of claim 100, wherein the new C-terminus of the N-terminal fragment portion is Glu 197 (residue 172 of SEQ ID NO:2) and the new N-terminus of the C-terminal fragment portion is Leu 198 (residue 173 of SEQ ID NO:2).